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Abstract

This paper is principally focused on the changes in the size and structure of work force and the changes in labour productivity, wages and poverty in India in the first quinquennium of the 21st century. The period between 2000 and 2005 saw a sharp acceleration in work force growth, and, on the obverse side, a slow-down in the rate of growth of labour productivity across most sectors and in the economy as a whole, and, a slow-down (a decline) in real wage growth in rural (urban) India. On a comparable basis, the reduction in poverty over this period is shown to be substantially smaller than indicated by other recent analyses. Consistent with the trends in labour productivity and real wages, relative to the 1994-2000 period, the pace of poverty reduction between 2000 and 2005 shows, at best, a marginal acceleration (or a marginal deceleration, depending on the choice of poverty lines) in rural India and a clear slow-down in urban India. This period also saw a small rise in the number of working poor and a substantial rise in the number of self-employed and regular wage/salary workers in 'above poverty line' or APL-households.

Key words: Employment Growth, Employment Structure, Labour Productivity, Real Wages, Poverty, Working Poor and Employment Quality.

JEL Classification: J21, J23.

This paper is principally focused on the changes in the size and structure of the usual (principal plus subsidiary) status work force in India in the first quinquennium of the 21st century. It also examines the changes in labour productivity, wages and poverty over this period. The estimates of poverty are derived by combining comparable estimates (on mixed reference period) for 2004-05 of the proportion of **households** in 'below poverty-line' households from the 61st Round Consumer Expenditure Survey and the size-distribution of persons from the 61st Round Employment-Unemployment Survey. These estimates suggest that the extent of decline in poverty between 2000 and 2005 is significantly smaller than indicated by Himanshu (Himanshu 2007) and Mahendra Dev and Ravi (Mahendra Dev and Ravi, 2007). Our estimates of poverty also enable us to address the issues of the working poor and of the quality of employment growth over this period.

The paper is organised as follows.

The first section presents and discusses the estimates of population and workforce over the period 1983-2005 as a backdrop to the more detailed analysis of the changes in the size and structure of work force between 2000 and 2005. Following our earlier paper (Sundaram, 2007), the discussion highlights the issue of age-distribution underlying the overall (all ages) worker-population ratios

(WPRs) coming from the NSS Employment-Unemployment Surveys, and, using the smoothed age-distribution of population from the Population Censuses of 1981, 1999 and 2001, brings out the critical differences between the survey-based and the Census age-distributions. It is shown that, with the Census-based age-shares as weights to derive the overall WPRs from the survey-based age-specific WPRs, the slow-down in the growth of work force between 1993-94 and 1999-2000 relative to that between 1983 and 1993-94 is much less marked than in other analyses. A similar comparison of the age-distribution of the population as per the 61st Round Employment-Survey and that from Population Projections carried out by Professor Mari Bhat, shows the two age-distributions to be fairly close. Consequently, we use the survey-based WPRs (all-ages) – separately for rural males, rural females, urban males and urban females - to derive the work force estimates by gender and rural-urban location for 2004-05. These estimates indicate a significant acceleration in the growth of workforce – especially the female work force – between 2000 and 2005 relative to both the 1980s and the 1990s.

The second section analyses the changes in the structure of work force. We begin by examining the changes in the activity-status of the work force. This brings out the sharp-growth in Self-Employment and the reduction in the share of casual labour, with the proportion of Regular Wage/Salary Workers not showing much of a variation-except for Urban females who show a rise in the share of

such workers. Even with more or less unchanged shares of RWS workers, the sharp growth in total workforce ensures a significant increase in the average annual increments in such workers relative to both the 1980s and the 1990s to dispel any notion of “jobless growth”. This section examines next the changes in the broad industrial and occupational distribution of the workforce in the first quinquennium of the 21st Century.

Building on the analysis of the industrial distribution of the work force, the next section examines the growth in labour productivity by broad industrial sectors and the changes in real wages of adult casual labourers by gender and rural-urban location.

Against the backdrop of the slow-down in growth of labour productivity and in the growth of real wages of casual labourers in rural areas (and a **decline** in real wages in Urban India) section IV presents the estimates of poverty among the general population. Our estimates indicate only a marginal acceleration (or a marginal slow-down, depending on the choice of the poverty line) in rural India and a clear slow-down in urban India in the pace of poverty reduction between 2000 and 2005 relative to that in the 1994-2000 period.

The final section presents our estimates of the working poor and examines the quality of employment – especially of the self-employed – in terms of average annual increments of such workers located in ‘above poverty-line’ households.

I. Population, WPRs and Work Force Growth

Estimates of population, separately for rural males, rural females, urban males and urban females, for (the mid-point) of the survey years, provide the starting point for estimating the size of the work force by gender and rural-urban location.

Table 1 provides the estimates of all-India population for the four survey years: (January – December) 1983; and (July-June) 1993-94, 1999-2000 and 2004-05. For the first three time points, the segment-wise population totals are based on inter-censal interpolations based on the 1981, 1991 and the 2001 Population Censuses. The estimates for 2004-05 are based on Population Projections for India and States, 2001-2026 prepared by the Technical Group on Population Projections constituted by the National Commission on Population, May 2006 (ORG & CCI, 2006).

As can be readily seen, in all the four population segments, there has been a significant show-down in the rate of growth of population in the first quinquennium of the 21st Century: from a little under 2 percent per annum between 1994 & 2000 to a little under 1.7 percent per annum. Nevertheless, India's population has grown by close to 88 million between 2000 and 2005.

In a recent paper (Sundaram, 2007) we had drawn attention to the fact that the segment-specific overall worker-population ratios (WPRs for short) are nothing but weighted averages of age-specific WPRs with the (survey-based) share of each age-group in the (segment-specific) population total, as per the survey, providing the weights. It was shown that using the survey-based age-distribution results in a sharp slow-down in the growth of prime age (15-59) population – from 2.74 percent per annum (pcpa) between 1983 & 1994 to 1.93 pcpa between 1994 and 2000. In the context of the observed slow-down in the rate of growth total population (reflecting fertility decline) over the same period, equally problematic is the acceleration-albeit small- in the rate of growth of population in the 0-9 age-group raising doubts about the order of decline in the share of 0-9 age-group between 1983 and 1993-94 (as per the two surveys).

Taking care of the concerns about age mis-reporting in the Population Census by using “smoothed” age-distributions for the Censuses, Table 2 presents the survey based age-distribution and the (closest) Census-based age-distributions for 1981, 1991 and 2001. This bring out the nature of the differences in the two age-distributions, especially for 1983 (relative to the 1981 Population Census) where the survey-based share of 0-9 is higher for rural males and urban males and for 1993-94 relative to the 1991 Population Census where the survey-based age-shares in this and the next age-group are substantially lower for females.

The previously stated concerns about the consequences of adopting the survey-based age-distribution (acceleration in the rate of growth of population in the 0-9 age-group and a slow down in the rate of growth of prime age-population) lead us to choose the Census age-distribution to weight the age-group-specific WPRs from the NSS Employment-Unemployment Surveys, taken as they are, to derive, for each of the four population segments the overall (all-ages) WPRs for 1983, 1993-94 and 1999-2000.

Table 2 also presents for 2004-05 a comparison of the survey-based age-distribution with our estimates based on interpolations of projected populations for 1st April of 2002 and 2007¹.

For the rural and urban females, the age-distributions are fairly well matched. For rural males the age-share in the 0-9 and 60+ age-groups are well matched but the projections- based age-distribution shows a higher share for the 15-29 age-group with lower shares for both the 10-14 and the 30-59 age-groups.

For urban males, the projections-based distribution show smaller shares for the 0-9 and 10-14 age-groups and fractionally higher shares for the 15-29 and the

¹ These projections were carried out (and kindly made available to me) by Professor P. N. Mari Bhat, Director, IIPS, Mumbai. Needless to say, the responsibility for the interpolation-based estimates of age-distributions for 1st January 2005 rests solely with the author.

30-59 age-groups. As we shall see presently, the projection-based age-distributions yield a somewhat higher overall WPRs for males in both rural and the urban areas of the country and slightly lower WPR for rural females. Given that our estimates of age-distribution for 2004-05 are based on projections rather than a Census count for 2004-05, we accept the survey-based age-distributions for 2004-05².

In Table 3, we present the age-specific WPRs on the usual (principal plus subsidiary) status for the four population segments for 1983, 1993-94, 1999-2000 and 2004-05 to see the changes between 2000 and 2005, which is what we will focus on, against the backdrop of trends since 1983.

For **rural males**, the changes in age-specific WPRs are either small or broadly in line with the trends since 1983 – except for the (16 points per 1000) rise in WPR in the 25-29 age-group³.

For **urban males**, the sizeable increase in WPRs in the 15-19, 20-24, 25-29 age-groups do appear to be out of line with the trends since 1983.

² If we had gone with projections-based age-distributions, the estimated work force would be higher by 3.5 million, which, at 0.76 percent of the estimate based on the survey-based age-distribution, is quite small.

³ The WPR in the 60+ age-group for 1999-2000 is perhaps too low and the 2004-05 figure more in line with the trends since 1983.

The increases in WPRs for males – the four cases identified above - pale into insignificance compared to the big jumps in the age-specific WPRs for females. For **rural females** we have a 22 point (per 1000) rise in the 25-29 age-group, a 42 point rise in the 30-44 age-group and a whopping 51 point rise in the 45-59 age-group.

In the 25-29 age-group, the 22 point rise in WPR on UPSS is made up of a 6 point decline on the principal status and a 28 point rise on the subsidiary status. The increase in the UPSS WPR for rural females in the 30-44 age-group is a made up of a 15 point rise on the principal status and a 27 point rise on the subsidiary status while in the 45-59 age-group, the rise in the UPSS WPR overwhelmingly reflects a rise in WPR on the principal status. In all the three age-groups, the WPRs on the subsidiary status are still below the levels in 1993-94. And, there is no a priori basis for not accepting the increases in WPRs on the principal status.

For **urban females** the increases in WPRs are significant in the 15-19 and the 20-24 age-groups and are out of sync with the trends since 1983. In the 30-44 age-group, three-fourths of the rise in the UPSS WPR reflects a rise in WPR on the principal status and the underlying WPR on the subsidiary status, while being higher than the 1999-2000 level, are still lower than the level for 1993-94.

In row 9 of Table 3, we present the overall (all-ages) WPRs with the survey-based age-shares providing the weights to derive the weighted-average of age-specific WPRs while row 10 reports the overall WPRs when the Census-based (projections-based for 2004-05) age-shares are used to weight the age-specific WPRs from the respective surveys.

In deriving our estimates of usual (principal plus subsidiary) status workforce, for reasons already discussed, for 1983, 1993-94 and 1999-2000 we combine the segment-specific population totals (Table 1) with the overall WPRs given in row 10. However, we prefer to use the survey-based overall WPRs (row 9) in the four population segments together with the projected population totals for the four population segments, to derive our workforce estimates for 2004-05⁴ (Table 4).

The growth rates presented in Table 4 point to the following conclusions:

First, the extent of slow-down in rate of growth of total work force between 1993-94 - 1999-2000 (relative to the 1983-94 period), from 1.71 to 1.45 percent per annum (pcpa), is much less marked than the decline from 2.04 to 0.98 pcpa indicated in the Report of the Task Force on Employment Opportunities (GOI 2001).

⁴ As noted in a earlier footnote the differences are quite negligible.

Second, this slow-down in the rate of growth of work force in the 1990s was primarily a rural phenomenon, though females in both rural and urban areas experienced a sharp slow-down in growth.

Focusing on the 1999-2000 - 2004-05 period, we find:

- (1) Relative to the growth between 1994 and 2000, we have a sharp acceleration in work force growth in all the four population segments, with a near doubling of the rate of growth of total work force, while the rate of growth of female work force rises five fold.
- (2) In terms of levels, we have an increase of a little over 57 million in the total work force of which about 20 million took place in urban India.
- (3) In terms of gender-composition, the share of females in the total work force has increased from 30.8 percent in 1999-2000 to 32.5 percent in 2004-05. Even at this level, the share of women in the total work force is less than their share in 1983 (33.5 percent) and, only marginally higher than their share in 1993-94 (32.2 percent).
- (4) To conclude this section, it is useful to note that if we had used the age-shares from the 2001 Population Census to weight the 2004-05 age-

specific WPRs, the total, all-India work force would have been 444.4 million or about 13.5 million lower than our present estimates. The difference (13.5 million) measures the impact of the changes in age-distribution since 2001 and is a rough indicator of the so-called “demographic dividend”.

II Structure of Work Force: Activity-status, Occupational and Industrial Distribution.

We begin this discussion of the changes in the structure of work force by focusing on the activity-status distribution of the work force separately for rural and urban India and for males and females (Table 5).

In rural India, we have a significant reversal of the past trends in the activity-status distribution of the work force. The share of the self-employed, which had declined from 610 (per 1000) in 1983 to 580 in 1993-94 and further to 554 (per 1000) in 1999-2000, rose sharply to 601 in 2004-05. Parallely, the rise in the share of casual labourers from 314 in 1983 to 355 per 1000 in 1993-94 and further to 377 in 1999-2000 gives way to an equally sharp fall to 328 per 1000 in 2004-05. As for the regular wage salary workers (RWS workers for short), after a decline in its share between 1983 & 1993-94 (from 76 per 1000 to 65 per 1000), the share of RWS workers registers a small rise – both between 1993 and 1999-2000 (to 69 per 1000) and between 1999-2000 and 2004-05 (to 71 per 1000).

In urban India, after moving narrowly (between 417 and 423 per 1000) over the period 1983 - 1999-2000, the share of the self-employed records a sharp rise (from 420 to 454 per 1000) with an off-setting decline in the share of the casual labourers. The share of the RWS workers, which had fallen between 1983 and 1993-94 (from 403 to 394 per 1000), after rising by 5 points (per 1000) by 1999-2000, slips down fractionally (to 396 per 1000) to be just above its share in 1993-94.

By gender, the rise in the share of the self-employed (and the offsetting fall in the share of the casual labourers) between 2000 and 2005 is sharper for females than for males. Over the same period, the share of RWS workers in female work force also records a significant rise (from 77 to 90 per 1000) while, for male workers, the rise in the share of RWS workers, while present, is more subdued.

Let us focus briefly on the growth of regular wage-salary workers, which, we have argued elsewhere, (Sundaram, 2007) is a good indicator (better than the DGE&T estimates) for tracking the growth of “jobs” in the country. (See Table 6)

In the country as a whole, the number of regular wage/salary workers has increased by a little over 10.7 million in the five years separating the 55th and 61st Round Employment-Unemployment Surveys i.e. at over 2.14 million per annum.

In contrast, the annual average increment to the number of RWS workers between 1st July 1983 to 1st January 1994 (the 1980s) was about a third at 0.41 million. Between 1993-94 and 1999-2000 (the 1990s) the average annual increment to the number of RWS workers, at 1.46 million was more than twice that realized during the 1980s. So that, the widely-held perception of the 1990s being a period of “jobless growth” based on a simple comparison of the DGE&T numbers on organized sector employment is at complete variance with the fact of much faster and rising growth of jobs in terms of the number of RWS workers in the country since 1993-94.

In terms of absolute numbers, the largest increase over this period has been that of the self-employed: by over 49 million with 75 percent of this increase taking place in rural India. The number of casual labourers, on the other hand, declined by a little over 2.7 million.

We turn now to a discussion of the changes in the **industrial distribution** of the work force (Table 7). At the outset, it needs to be emphasized that the classification adopted in the 55th and the 61st Round surveys is based on NIC 1998. So that while the composition of broad industry groups are by and large comparable with the results for 1993-94, there are some differences. Notably, repair services is now a part of the Trade, Hotels and Restaurants and not of Social, Community and Personal Services as earlier. So that, for rural and urban

areas taken together, the share of the Trade, Hotels and Restaurants for 1993-94 would need to be raised by about 9 points per 1000 to be comparable with the shares presented here for 1999-2000 and 2004-05 [See Sundaram (2001)].

As one would expect, we have a continuation of the long-term trend of a decline in the share of “Agriculture and Allied Activities” and, at the present pace of decline, another decade might see the share of agriculture in employment going below the 50 percent mark. Despite this sizeable decline in its share, the absolute number of workers in this sector has increased by nearly 18 million i.e. over 30 percent of the incremental work force. (Table 10)

In all the four population segments the first quinquennium of this century has witnessed a rise in the share of manufacturing in work force and this increase has been particularly large (over 4 percentage points) for urban females. Combined with a 2.7 percent per annum growth in the total work force, this rise in share of manufacturing in all segments has resulted in a spectacular 4.8 percent per annum growth in total manufacturing sector employment. This sector accounted for a little over 20 percent of the incremental work force during this period.

The Secondary Sector, covering Manufacturing, Electricity, Gas and Water Supply and Construction, raises its share from 15.8 percent in 1999-2000 to 18.2

percent in 2004-05. This sector added a little over 20 million to its work force and accounted for 35 percent of the incremental work force over this period.

In the Tertiary or the Services sector, we have a reduction, albeit small, in the share of the Social, Community and Personal services. The other services sectors – Trade, Hotels and Restaurants, Transport, Storage and Communication and Finance, Insurance, Real Estate and Business Services – each added between 4 to 6 points (per 1000) to its share. Overall, the share of services went up only slightly from 23.7 to 24.8 percent.

Focusing on **female workforce**, we have a more moderate decline in the share of agriculture and allied activities (by 28 points per 1000 as against the 45 points decline for males). Almost all of this decline in the share of agriculture is offset by the rise of the share of manufacturing (17 points) and social, community and personal services (8 points).

To complete our discussion of the changes in the structure of work force, the estimates of the occupational distribution of the work force are presented at the one-digit occupation, division level (Table 8) as well as for identified 2-digit occupation groups in Table 9.

Consistent with the declining share of Agriculture, the share of Division 6 (Farmers, Fishermen, Hunters, Loggers and related workers) records a 32 point

decline between 2000 and 2005. However, reflecting the rise in the share of the self-employed and the decline in the share of casual labourers, at the 2-digit level, we have a small rise in share of “Cultivators” and a sharp, 49 points per 1000, decline in the share of agricultural labourers. The fact that decline in the share of Occupational Division 6 (32 points) is **smaller** than the decline in occupational groups 61 (cultivators) and 63 (agricultural labourers) taken together, (43 points) implies that there has been a measure of occupational diversification within Division 6.

At the upper end of the skill-spectrum, the share of both divisions 0-1, and 2 (Professional, Technical and related workers and Administration and Managerial Workers) show a rise – smaller for Division 1 relative to Division 2 - in all the segments distinguished. Within the broader Division 0-1, for females, there has been a marginal reduction in the share of health care sector and a slight rise in the share of Teachers.

Continuing the trend noted over a longer period, since 1961 [See Sundaram, (2001)], the share of clerical workers in the urban work force declines further (from 79 per 1000 to 68 per 1000) in the first five years of the 21st century. However, reversing earlier trends, the share of sales workers shows a rise in all the segments, despite a fall in the share of “Merchants and Shop Keepers” in urban India (see Table 9).

Except for a marginal decline in their share in the rural work force, service workers (Division 5) record a marginal rise overall, reflecting a rise in the share of service workers, primarily as domestic workers (with the share of personal services showing a small decline), in the female work force.

In the broad occupation category of Production Process and related workers, Transport Equipment operators and labourers not elsewhere classified (Divisions 7, 8 and 9, taken together), we have a rise in the share of Tailors, Dress-Makers etc. in all the population segments. Also, reflecting the rise in the share of construction activities, occupational group 95 (Brick layers and other construction workers) records a rise in its share in almost all segments – except for females. The decline in the share of this occupation group in female work force is in line with the decline in the share of construction for urban females by 10 points (per 1000). As for the share of transport equipment operators, where the presence of female workers is negligible, we have a rise in the rural, urban and the total work force.

Overall, despite the above-noted changes, our conclusion about the occupational structure of the Indian work force as of 2000 (See Sundaram 2001) still holds true: India remains a land of farmers, fishermen, hunters and loggers, with

marginal gains in the share of production process workers and of professional and technical workers and administrators, executive and managerial workers.

III Labour Productivity and Real Wages.

Table 10 presents our estimates of number of workers by broad Industry groups, built up by combining segment specific estimates of work force (Table 4) and (segment specific) industry-group shares (Table 7), for all-India for 1999-2000 and 2004-05. Combining these estimates with the NAS – estimates of Gross Domestic Product (at constant 1999-2000 prices) for the two years, we derive constant price estimates of GVA per worker for the two years. Below the estimates for 2004-05, we also present the compound rates of growth of the relevant variables over the period 2000-2005. For easy comparison, Column 9 presents comparable rates of growth for GVA per worker over the period 1993-94 - 1999-2000.

Having discussed the rates of growth in sectoral work force in the previous section, let us focus on the trends in labour productivity across sectors as measured by GVA per worker, and their rates of growth between 2000-2005.

In terms of levels, the Agriculture and Allied Activities, with over 56 percent of the workforce, not only continues to have the lowest GVA per worker but also, its

position vis-a-vis the productivity of the total work force has worsened from being 42 percent of overall GVA per worker in 1999-2000 to just 37 percent in 2004-05.

Construction, with about 6 percent of the workforce, has the second lowest GVA per worker (still three times that in the Agriculture sector). Over the period 2000-2005, labour productivity grew at less than one-fourth of one percent per annum adding less than Rs.150 per year.

In the **manufacturing sector**, where employment grew at an impressive 4.75 percent per annum between 2000 and 2005, the growth in GDP averaged 6.44 percent per annum. The high employment-elasticity of manufacturing sector implicit in these two numbers also implied that labour productivity in this sector grew at less than 1.6 percent per annum - roughly half the rate of growth of labour productivity of the total work force. So that, the excess of labour productivity in manufacturing relative to that in the economy as a whole falls from 33 to 23 percent over this period.

Two sectors, Trade, Hotels and Restaurants, and Transport, Storage and Communication (together employing 14 percent of the total work force) – especially the latter - record a strong growth in labour productivity over the period 2000-2005.

Except for the two sectors noted above, and the Construction sector, where a small negative growth between 1994 and 2000 turns into a small positive growth between 2000 and 2005, in each and every other sector and for the economy as a whole, **labour productivity growth over the period 2000-2005 has been lower, and significantly so, than the growth in labour productivity realised between 1993-94 and 1999-2000.**

While the levels of and trends in labour productivity directly impinge on the returns to labour of the self-employed across sectors, in a market economy, they also shape the level of and the trends in real wage rates of casual labourers.

Given the significant slow-down in the rate of growth of labour productivity between 2000 and 2005 relative to that realised between 1994 and 2000, the significant slow-down in the rate of growth of real wage rates for rural male and rural female casual labourers (Table 11) should not surprise anyone. What is striking however, is the fact that, both for males and females, the real wage rates for adult casual labourers in urban areas have actually declined. Significantly, over this period there has been very little increase in the number of casual labourers (only 70,000 over a five year period) in urban India.

IV Estimates of Poverty in India: 1994-2000

Two recent papers by S. Mahendra Dev and Ravi, and Himanshu (both in EPW, February 10, 2007), have analysed recent trends in poverty and inequality and have come to broadly similar conclusions: that the pace of poverty reduction accelerated (sharply according to Himanshu) between 2000 and 2005 relative to the reduction between 1994 and 2000.

In the absence of a size-distribution of persons by expenditure classes on the mixed reference period in the only published report (Report No. 508) based on the 61st Round Consumer Expenditure Survey, Himanshu's results are based on estimates of household consumer expenditure canvassed on a worksheet in the NSS 55th and 61st Employment-Unemployment Surveys both using a mixed reference period. Mahendra Dev and Ravi too have to approximate the size-distribution on mixed reference period with only the size-distribution of persons on uniform reference period and **mean** per capita expenditure on MRP, which, in many cases, fall **outside** the defined expenditure class intervals, as available raw materials.

However, at least at the all-India level, there is a better alternative available in Tables 6R and 6U of Report 508. They present the per 1000 break-up of households by adjusted MPCE Class (based on 365-days' data for clothes, footwear, education, medical (institutional) and durable goods). This can be used directly to estimate, in the first instance, the proportion of **households** below the

poverty line in 2004-05 with parallel estimates from the NSS 55th Round Consumer Expenditure Survey – with or without adjustments for so-called ‘contamination’. And, corresponding to this proportion of households below the poverty line on the mixed reference period drawn from the 61st Round Consumer Expenditure Survey, we can derive the proportion of persons below the poverty line or the Head Count Ratio from the 61st Round Employment-Unemployment Survey⁵.

However, this is possible only at the all-India level. So that, we can not derive the all-India Head Count Ratio as a weighted average of State/Segment specific HCRs. However, given an all-India poverty-line, this procedure can be implemented by using the all-India poverty line on the all-India size-distribution – in this case, of households – from the 61st Consumer Expenditure Survey in the first instance, and, thence, derive estimates of head count ratios **(of persons below poverty line)** from the 61st Round Employment-Unemployment Survey.

Before presenting our results, which are based on a slightly different set of poverty lines for all-India, let us first put together the results based on the Planning Commission poverty lines for 1999-2000 and 2004-05. (See Table 12)

⁵ A similar methodology was used by us earlier to analyze the Poor in the Indian Labour Force (Sundaram and Tendulkar, 2003).

As can be readily seen, **the order of decline**, between 2000 and 2005, in the proportion of poor households (4.5 percentage points in rural India and 1.5 percentage points in urban India) and that in HCR for persons (respectively, 4.3 and 1.5 percentage points in rural and urban India) are roughly the same.

In contrast, Mahendra Dev reports a decline in HCR between 2000 and 2005 of the order of 5.6 percentage points for rural India and 3.7 points for urban India, while Himanshu reports a whopping 9.1 percentage point reduction for rural India and a 3.9 percentage point reduction for urban India.

It needs to be stressed that **our estimates** of the proportion of households below the poverty line for 2004-05 are **based on the 61st Round Consumer Expenditure Survey results for mixed reference period and are**, therefore comparable with the results of the 55th Round Consumer Expenditure Survey. So that, **prima facie**, there is a strong presumption that the results of both Himanshi and Mahendra Dev and Ravi about the order of decline in HCRs in both rural and urban India over the period 2000-2005 need to be substantially revised downwards.

To answer the question whether the pace of poverty reduction has accelerated between 2000 and 2005 relative to the period 1994-2000, Table 12 also presents

the estimates of HCRs for households and persons for 1993-94 with Planning Commission poverty lines for all-India.

In terms of households below the poverty line in rural India, the average annual decline between 1994 and 2000 was 0.75 percentage points per year i.e. at a compound rate of a little over 3.0 percent per annum while the rate of decline between 2000-2005, was 0.9 percentage points per year or, on a smaller base, at a little over 4.2 percent per annum.

In urban India, the rate of reduction in HCR of households was 0.77 points per annum at a compound rate of 3.7 percent per annum between 1994 and 2000, while between 2000 and 2005, the urban HCR for households declined by just 0.3 points per year or 1.7 percent per annum.

In terms of persons, with the Planning Commission poverty lines, in rural India, HCR declined by 4.8 percentage points or 0.8 points per year or at 2.7 percent per annum between 1994 and 2000 and by 0.9 points per year or at 3.4 percent per annum between 2000 and 2005 indicating a small increase in the pace of poverty decline in the first five years of the 21st Century. In urban India, however, in terms of HCR for persons also we have a clear slow-down – from 0.78 points per year between 1994 and 2004 to just 0.3 points per year between 2000 and 2005.

Our estimates of poverty, based on alternative poverty lines (Panel B, Table 12) however indicate that this result of a slightly faster pace of poverty reduction between 2000 and 2005 is reversed with a small reduction in the pace of poverty reduction from 2.8 percent per annum to 2.5 percent per annum. Our estimates with alternative poverty lines also re-inforce the result of a slower reduction in urban poverty between 2000 and 2005 relative to that between 1994 and 2000.

The above results of a marginal rise (or a marginal reduction depending upon the choice of poverty lines) in the pace of poverty reduction in rural India and a clear slow-down in the pace of poverty reduction in urban India between 2000 and 2005 is consistent with the slow-down in the rate of growth of labour productivity across most sectors and in real wages of casual labourers in rural India and the absolute decline in real wages of casual labourers in urban India that we discussed in the previous section.

V. The Working Poor and the Quality of Employment

In this the final section of the paper, we track the changes in the number of workers in 'below poverty-line' or BPL households or the working poor and its complement, those located in households above the poverty-line or APL households. As we have argued elsewhere (Sundaram, 2007), changes in the number of workers in APL-households is a good indicator of the quality of employment – especially of the self-employed.

Consider first our estimates of the working poor and the underlying head count ratios for workers differentiated by gender, activity-status and rural-urban location (Table 13).

In the country as a whole and taking all activity-status and gender categories together, we find a small increase (1.3 million) in the number of working poor who totalled a little under 105 million at the beginning of 2005. This rise in the number of the working poor occurs despite a fall in the head count ratio for the total work force: from 25.7 percent to 22.8 percent between 2000 and 2005.

The rise in the total number of working poor is primarily the net result of two off-setting movements: an increase of a little under 6.2 million in the number of self-employed poor more than compensating a decline in the number of casual labourers by a little under 5.5 million. While the rise in the number of self-employed poor occurs despite a 1.6 percentage points decline in HCR, the reduction in the number of casual labourers in BPL-households reflects the combined effect of an absolute reduction in the number of casual labourers – from 132.4 million in 2000 to 129.7 million in 2005 – and a reduction in the HCR for such workers from 39.3 percent to 35.9 percent over the same period.

By Gender, women workers experience a sharper reduction in their HCR relative to their male counterpart. Consequent upon an over 5 percentage point reduction in HCR, there is a sharp reduction in the number of female casual labourers in BPL households - by 3 million – in the first quinquenium of this century. Curiously, despite a marginal reduction in their HCR, there is a rise in the number of female RWS-workers in poor households. The biggest contributors to the rise in the number of female workers in BPL-households are, however, the self-employed. The number of poor female self-employed workers increased by over 3 million (despite a reduction in HCR for female self-employed workers) between 2000 and 2005.

In Urban India, while the RWS workers record a small reduction in HCR (but a very marginal rise in the number of such workers in BPL households) both the self-employed and the casual labourers – especially the latter – record a rise in HCR. At 2.6 percentage points, the rise in HCR for casual labourers in urban India is quite sizeable but is also entirely consistent with the absolute decline in real wages of such workers discussed earlier. **Overall, the number of working poor in urban India rose by a little over 4 million between 2000 and 2005.**

In rural India, there is a decline in HCR for all the three activity-status categories. Aided by a 2.8 million reduction in the total number of casual labourers in rural India and a decline in their HCR by 4.4 percentage points, the number of rural

casual labourers in BPL-households declined by close to 6 million between 2000 and 2005. This is only partially offset by the rise in the number of self-employed poor in rural India (by a little over 3 million). So that, **despite a significant growth in the total rural work force, we have a 2.8 million reduction in the number of working poor in rural India.**

Finally, we look at the quality of employment growth. In an earlier paper (Sundaram, 2007), we had argued that a useful indicator of employment quality especially for the self-employed where the returns to labour per se are ill-defined and virtually impossible to measure through single visit surveys such as the NSS Employment-Unemployment Surveys – would be whether they are located in ‘above poverty-line’ or APL households.

In Table 14, we present our estimates of the average annual increments to the number of workers in APL-households for three time periods: 1983-94; 1994-2000; and, 2000-2005. They are presented separately for the rural and the urban areas and for the country as a whole. In each case, the three activity-statuses – namely, self-employment, regular wage/salary work and casual labour – are distinguished.

In comparison with the 1980s (the period between the 1983 and 1993-94 NSS Employment-Unemployment Surveys), we find that, in **rural India**, while the

annual increments to the self-employment workers in APL-households records a sharp rise of nearly 6.8 million between 2000 and 2005 after a 1.5 million reduction between 1994 and 2000, the average annual increments to casual labourers falls in APL households by close to 2 million between 2000 and 2005 after a small rise (0.7 million) between 1994 and 2000. The annual increments to RWS-workers in APL-households records a steady rise over the three periods.

Taking all three activity-status categories together, the average annual increments to the rural workers in APL-households has risen by a little over 80 percent in 2000-2005 period relative to that between 1994 and 2000 and by close to two-thirds relative to the average annual increments in such workers between 1983 and 1994.

In **Urban India**, the average annual increments to workers in APL-households has increased over the successive periods, with the 2000-2005 period recording a 32 percent jump relative to that realized between 1994 and 2000. Relative to the 1980s, the annual average increments to 'good quality' employment has more than doubled in the first five years of this century. This has been made possible by a near – doubling of the annual average increments to the number of self-employed located in APL-households in the period 2000-2005 relative to the 1994-2000 period. Not surprisingly, given the rise in HCR among urban casual

labourers between 2000 and 2005 noted earlier, there is an absolute decline in the number of urban casual labourers located in APL-households.

In the country as a whole, a little over 11.1 million workers were added every year to the above-poverty-line households between 2000 and 2005 which very nearly equals the average annual increments to the total workforce over this period (with BPL-workers growing by 0.26 million per annum). Mirroring the situation in rural India, there has been a big jump (over 30 percent) in the average annual increments to the self-employed workers in APL-households.

It is also significant that the number of RWS-workers in APL-households has increased by a little over 2 million per annum between 2000-2005 – more than double the average annual growth in such workers in the 1980s. Even between 1994 and 2000, the average annual increments to RWS-workers in APL-households was over 50 percent higher than that between 1983 and 1994. This, taken with the larger increments to the total number of RWS workers should dispel any lingering notion of the period since 1993-94 being a period of “jobless growth”.

As a group, casual labourers, have not done as well – especially in the urban areas – as the other two activity-status categories. The sharp slow-down in the

average annual increments to casual labourers in APL-households between 2000 and 2005, relative to both the 1994-2000 and the 1983-1994 periods, well reflects the slow-down in the growth of real wages of adult casual labourers in rural India and the absolute decline in real wages of these workers in urban India between 2000 and 2005.

To summarise:

The first quinquennium of the 21st century saw a sharp acceleration in work force growth – especially of females – with a little over 57 million added to the total work force. Of this incremental work force 49 million were self-employed and 10.7 million were RWS – workers – dispelling any notion of “jobless growth”. The number of casual labourers, however declined by a little over 2.7 million.

In terms of industrial distribution, a spectacular 4.8 percent per annum growth in manufacturing employment and a continued decline in the share of agriculture – to a little over 56 percent – is noteworthy. Despite some occupational diversification, India still remains a land of farmers, fishermen, hunters and loggers, with marginal gains in the share of production process workers and of professional and technical workers, and administrators, executive and managerial workers.

The obverse side of the acceleration in work force growth is the slow-down in the rate of growth of labour productivity across most sectors and in the economy as a whole. Not surprisingly, we also have a slowdown in the rate of growth of real wages of casual labourers in rural India and an actual decline in real wages in urban India.

Our analysis of poverty shows that, on a comparable basis, reduction in poverty is substantially smaller than indicated by Himanshu and Mahendra Dev and Ravi. Relative to the pace of poverty reduction between 1994 and 2000, we have, at best, a marginal acceleration (or, deceleration, depending on the choice of the poverty lines) in rural India, and a clear slow-down in urban India in the pace of poverty reduction between 2000 and 2005.

Finally, reflecting largely the net result of a decline in the number of casual labourers in BPL-households (5.5 million) and a rise in the number of self-employed from (6.2 million), the number of working poor rose by a little over 1 million between 2000 and 2005 with their number totaling a shade under 104.5 million as on 1st January 2005.

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Table 1
All-India Population by Gender and Rural-Urban Location 1983 – 2004-05.
All-India Population
(in thousands)

Population Segment	1983	1993-94	1999-2000	2004-05	Rates of Growth (% Per Annum)		
	(1.7.83)	(1.1.1994)	(1.1.2000)	(1.1.2005)	1983-1994	1994-2000	2000-2005
Rural Males	281,288	339,642	374,432	400,865	1.81	1.64	1.37
Rural Females	266,637	319,411	353,785	379,102	1.73	1.72	1.39
Rural Persons	547,925	659,053	728,217	779,967	1.77	1.68	1.38
Urban Males	91,217	124,031	145,878	164,732	2.97	2.74	2.46
Urban Females	80,445	111,104	131,244	148,332	3.12	2.82	2.48
Urban Persons	171,662	235,135	277,122	313,064	3.04	2.78	2.47
Total (R+U) Males	372,505	463,673	520,310	565,597	2.11	1.94	1.68
Total (R+U) Females	347,082	430,515	485,029	527,434	2.07	2.01	1.69
Total (R+U) Persons	719,587	894,188	1005,339	1093,031	2.09	1.97	1.69

Notes: Segment-wise population totals for 1983, 1993-94 and 1999-2000 are based on Inter-censal interpolations of total population, share of Urban area in total population and the share of females in rural and urban area based on the 1981, 1991 and 2001 Population Censuses. The estimates for 2004-05 are based on an interpolation of the total and urban population as on 1st October 2004 and 1st March 2005 as per Population Projections for India and States, 2001-2026, **Report of the Technical Group on Population Projections constituted by the National Commission on Population**, May 2006 (ORG&CCI, 2006). The segment-wise sex-composition as per the 2001 Population Census is used to derive the estimates for 2004-05.

Table 2

Survey & Census based Age-Distribution of All-India Population by Gender and Rural-Urban Location: 1981 – 2004-05

Per 1000 Distribution of Population by Rural Age-Groups

Panel A: Rural Males

	<u>Survey Based</u>				Census Based (Smoothed)			
Age-group	1983	1993-94	1999-2000	2004-05	1981	1991	2001	2005
0 – 9	284	261	255	238	278	268	255	237
10 – 14	136	120	128	127	127	121	122	118
15 – 29	244	258	250	253	250	259	261	272
30 – 59	270	294	296	311	280	289	295	302
60+	66	68	71	71	65	63	67	71
All Ages	1000	1000	1000	1000	1000	1000	1000	1000

Panel B: Rural Females

	<u>Survey Based</u>				Census Based (Smoothed)			
Age-group	1983	1993-94	1999-2000	2004-05	1981	1991	2001	2005
0 – 9	275	254	248	230	280	269	252	231
10 – 14	121	107	117	113	122	115	116	115
15 – 29	255	266	258	258	256	265	261	264
30 – 59	280	304	304	324	284	289	298	311
60 +	68	69	73	75	58	63	73	79
All Ages	1000	1000	1000	1000	1000	1000	1000	1000

Table 2 (Contd.)**Panel C: Urban Males**

	<u>Survey Based</u>				Census Based (Smoothed)			
Age-group	1983	1993-94	1999-2000	2004-05	1981	1991	2001	2005
0 – 9	241	218	202	183	236	225	196	177
10 – 14	125	115	116	104	118	113	110	100
15 – 29	294	292	291	300	298	292	296	303
30 – 59	287	321	331	349	300	317	336	353
60 +	52	55	59	64	48	53	62	67
All Ages	1000	1000	1000	1000	1000	1000	1000	1000

Panel D: Urban Females

	<u>Survey Based</u>				Census Based (Smoothed)			
Age-group	1983	1993-94	1999-2000	2004-05	1981	1991	2001	2005
0 – 9	249	216	201	179	256	236	199	177
10 – 14	122	114	114	108	122	115	109	98
15 – 29	291	291	287	283	295	297	293	303
30 – 59	275	314	327	354	275	295	328	347
60 +	63	65	71	76	52	57	71	75
All Ages	1000	1000	1000	1000	1000	1000	1000	1000

Notes: Starting with the more detailed (by 5 year age-group) age-distributions, the Census age-distribution for 1981, 1991 and 2001 has been smoothed using the smoothing procedure spelt-out in the Report of the Technical Group on Population Projections constituted by the National Commission on Population, May, 2006 (pp 3-4) (ORG&CCI, 2006). For 2005, the age-distribution has been computed by the author by interpolation of age-sex-location-specific populations for 1st January 2005 from population projections by age-sex and location for 1st April 2002 and 1st April 2007 kindly made available by Prof. Mari Bhat.

Table 3
All-India Age-specific Usual (principal plus subsidiary) Status Worker-population Ratios

by Gender and Rural-Urban Locations: 1983 – 2004-05

Panel A: Rural Areas

Per 1000 Worker-population Ratios

Sr. No.	<u>Rural Males</u>					<u>Rural Females</u>			
	Age-group	1983	1993-94	1999-2000		1983	1993-94	1999-2000	2004-05
1	0 – 9	13	6	4		13	7	4	2
2	10 – 14	253	138	91		240	141	96	74
3	15 – 19	666	578	503		452	364	304	319
4	20 – 24	897	859	844		488	456	410	410
5	25 – 29	968	958	950		557	525	491	513
6	30 – 44	985	986	982		614	598	572	614
7	45 – 59	955	968	958		552	543	518	569
8	60 +	670	695	625		233	242	218	253
9	All Ages (1)	547	553	531		340	328	299	327
10	All Ages (2)	558	545	535		341	319	297	322

Table 3 (Contd.)

Panel B: Urban Areas

Per 1000 Worker-population Ratios

Sr. No.	Age-group	Urban males				Urban females			
		1983	1993-94	1999-2000	2004-05	1983	1993-94	1999-2000	2004-05
1	0 – 9	4	3	2	1	3	3	1	2
2	10 – 14	113	66	49	48	70	45	36	33
3	15 – 19	414	356	314	335	155	123	105	128
4	20 – 24	727	674	658	684	182	180	155	201
5	25 – 29	921	904	883	909	229	224	194	229
6	30 – 44	975	975	969	975	291	295	266	310
7	45 – 59	926	935	921	923	276	283	250	252
8	60 +	505	442	402	366	140	113	94	100
9	All Ages (1)	512	521	518	549	151	155	139	166
10	All Ages (2)	525	517	528	558	150	149	140	167

Notes: Estimates of overall (all ages) WPRs in row 9 represents the weighted average of age-specific WPRs with survey-based age-shares as weights while those in row 10 have the census-based age-shares as weights

Table 4
All-India, Usual (principal & subsidiary) Status Workforce

by Gender and Rural-Urban Locations 1983 – 2004-05

Usual (psps) Status Work force

(in thousands)

Population Segment	Number of Workers (000)				Annual Rate of Growth (Percent per annum)		
	1983	1993-94	1999-2000	2004-05	1983-1994	1994-2000	2000-2005
Rural Males	156,959	185,105	200,321	218,872	1.58	1.33	1.79
Rural Females	90,923	101,892	105,074	123,966	1.09	0.51	3.36
Rural Persons	247,882	286,997	305,395	342,838	1.41	1.04	2.34
Urban Males	47,889	64,124	77,024	90,438	2.82	3.10	3.26
Urban Females	12,067	16,555	18,374	24,623	3.06	1.75	6.03
Urban Persons	59,956	80,679	95,398	115,061	2.87	2.83	3.82
Total (R+U) Males	204,848	249,229	277,345	309,310	1.89	1.80	2.21
Total (R+U) Females	102,990	118,447	123,448	148,589	1.34	0.69	3.78
Total (R+U) Persons	307,838	367,676	400,793	457,899	1.71	1.45	2.70

Notes: Segment-wise estimates of work force for 1983, 1993-94 and 1999-2000 have been derived by combining the population estimates in Table 1 with the overall (all ages) worker-population ratios reported in row 10 of Table 3. Estimates for 2004-05 have, however, been derived using the overall (all-ages) worker-population ratios reported in row 9 of Table 3 – based on the population age-distribution as per the Survey as they are broadly in line with the projected age-distribution.

**Table 5: Per 1000 Distribution of Work Force by Gender, Activity-Status and Rural-Urban Location:
All-India, 1999-2000 - 2004-05**

Per 1000 Distribution

Population Segment	1999-2000				2004-05			
	SE	RWS	CL	All	SE	RWS	CL	All
Rural Persons	554	69	377	1000	601	71	328	1000
Urban Persons	420	399	181	1000	454	396	150	1000
Males	510	179	311	1000	542	183	275	1000
Females	549	77	374	1000	610	90	300	1000
Total Persons	522	147	331	1000	565	152	283	1000

Table 6: Number of Usual Status workers by Activity-Status, Gender and Rural-Urban Location:
All-India, 1994-2000
(in thousands)

Population Segment	SE	RWS	CL	All	SE	RWS	CL	All
Rural Person	169,194	20,010	115,191	305,395	206,183	24,260	112,395	342,838
Urban Person	40,105	38,056	17,237	953,982	52,244	45,059	17,308	115,061
Males	141,468	49,518	86,279	277,345	167,750	56,405	85,155	309,310
Females	67,831	9,468	46,149	12,344	90,677	13,364	44,548	148,589
Person	209,299	59,066	132,428	400,793	258,427	69,769	129,703	457,899

Source: Derived from Tables 4 and 5.

Table 7: Industrial Distribution of Usual (Principal plus Subsidiary) Status Workforce by Gender and Rural- Urban Location: All-India, 1999-2000-2004-05

Panel A: Rural Areas
Per 1000 Distribution of Workforce

1999-2000				2004-05		
Industry-Group	Rural Male	Rural Female	Rural Person	Rural Male	Rural Female	Rural Person
Agriculture & Allied Activity	714	853	762	665	832	725
Mining & Quarrying	4	3	4	6	3	5
Manufacturing	73	76	74	79	84	81
Electricity, Gas & Water	2	0	1	2	0	1
Construction	45	11	33	68	15	49
Trade, Hotels & Restaurants	68	20	52	83	25	62
Transport, Storage & Communication	32	1	21	38	2	25
Finance, Insurance, Real Estate & Business Services	5	0	3	7	1	5
Social, Community & Personal Services	57	36	50	52	38	47
All	1000	1000	1000	1000	1000	1000

Panel B: Urban Areas
Per 1000 Distribution of Workforce

1999-2000				2004-05		
Industry-Group	Urban Male s	Urban Female s	Urban Person	Urban Males	Urban Females	Urban Person
Agriculture & Allied Activity	65	176	86	61	181	87
Mining & Quarrying	9	4	8	9	2	8
Manufacturing	224	240	227	235	282	245
Electricity, Gas & Water	8	2	7	8	2	7
Construction	87	48	80	92	38	80
Trade, Hotels & Restaurants	294	169	270	280	122	246
Transport, Storage & Communication	104	18	87	107	14	87
Finance, Insurance, Real Estate & Business Services	45	25	41	59	32	53
Social, Community & Personal Services	165	317	194	149	327	187
All	1000	1000	1000	1000	1000	1000

Panel C: All Areas
Per 1000 Distribution of Workforce

1999-2000				2004-05		
Industry-Group	Male	Female	Person	Male	Female	Person
Agriculture & Allied Activity	534	752	601	489	724	564
Mining & Quarrying	5	3	4	7	3	6
Manufacturing	115	100	110	124	117	122
Electricity, Gas & Water	4	0	3	4	0	3
Construction	57	17	45	75	18	57
Trade, Hotels & Restaurants	116	42	93	127	41	99
Transport, Storage & Communication	52	4	37	58	4	41
Finance, Insurance, Real Estate & Business Services	16	4	12	22	6	17
Social, Community & Personal Services	102	78	95	94	86	91
All	1000	1000	1000	1000	1000	1000

Table 8: Occupational Distribution of Usual (principal plus subsidiary) status workforce by Gender and Rural-Urban Location: All-India, 1999-2000 - 2004-05

Per 1000 Distribution of Work Force

[illegible]

Table 9: Per 1000 Share of some key identified 2-digit occupation codes of UPSS workforce: All India 1999-2000-2004-05

Occupational Group	Per 1000 Share in Work Force										
		1999-2000					2004-05				
Code	Description	Rural	Urban	Male s	Female s	Person	Rural	Urban	Male s	Female s	Person
08	Nursing Medical & Health Technicals	1	7	2	5	3	2	7	3	4	3
15	Teachers	12	38	16	24	18	14	43	18	29	21
30-35	Clerical Workers	11	79	34	12	27	9	68	30	11	24
40	Merchants & Shop Keepers	27	97	55	19	44	32	89	58	20	46
51-54	Domestic Services	5	44	9	28	15	8	55	13	35	20
55-56	Personal Services	10	13	11	10	11	8	16	11	8	10
61	Cultivators	371	35	283	309	291	384	37	283	326	297
63	Ag. Labourers	305	31	205	317	239	245	23	163	247	190
71	Miners & Quarrymen	3	3	3	2	3	3	3	4	2	3
75	Spinners, weavers etc	10	28	13	18	15	9	29	13	16	14
77	Food & Beverage Processors	6	13	8	7	8	6	8	7	6	7
79	Tailors, Dress makers etc	9	34	14	16	15	12	46	17	28	20
95	Brick Layers & Other Construction Workers	21	44	33	10	26	31	47	45	5	33
98	Trspt Eqpt. Operators	14	52	33	0	23	17	54	38	Nil	26
99	Labourers n.e.c.	24	49	36	15	30	24	30	32	12	25

**Table 10: Number of Workers, Gross Value Added & GVA per worker @ 1999-2000 prices by Broad Industry Groups:
All-India, 1999-2000 – 2004-05**

S. No.	Industry Groups	1999-2000			2004-05			Rog of GVA per worker 1994-2000
		No. of workers (000)	GDP (Rs. Crores)	GVA per worker (Rs.)	No. of workers (000)	GDP (Rs. Crores)	GVA per worker (Rs.)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Agriculture & Allied Activities	240,896	454,061	18,849	258,663 (1.43)	497,351 (1.84)	19,228 (0.40)	2.65
2	Mining & Quarrying	1,883	41,594	220,892	2548 (6.24)	52,594 (4.80)	206,413 (-1.35)	10.69
3	Manufacturing	44,260	264,113	59,673	55,900 (4.75)	360,822 (6.44)	64,548 (1.58)	5.61
4	Electricity, Gas & Water	1,054	44,732	424,402	1,211 (2.82)	53,097 (3.49)	438,456 (0.65)	11.59
5	Construction	17,747	105,149	59,249	25,998 (7.94)	155,920 (8.20)	59,974 (0.24)	(-) 0.48
6	Trade, Hotels, Restaurants & Repair Services	41,453	254,143	61,309	49,593 (3.65)	371,410 (7.88)	74,892 (4.08)	4.16
7	Transportation, Storage & Communication	14,848	131,754	88,735	18,587 (4.59)	238,705 (12.62)	128,426 (7.67)	2.73
8	Finance, Insurance, Real Estate & Business Services	4,925	140,567	285,415	7,780 (9.58)	216,131 (8.99)	277,810 (-0.54)	6.84
9	Social, Community & Personal Services	33,727	263,994	78,274	37,619 (2.21)	343,218 (5.39)	91,235 (3.11)	7.63
10	All	400,793	17,92,292	44,719	457,899 (2.70)	23,93,671 (5.96)	52,275 (3.17)	5.37

Notes:

- 1 Figures for GVA (and GVA per worker) in row 8 exclude contribution to GDP from Dwellings by way of actual and imputed rentals.
- 2 Figures within brackets indicate the compound rate of growth (percent per annum) between 1999-2000 and 2004-05 of the variable in each cell.
- 3 Figures in Column (9) for rate of growth of GVA per worker between 1993-94 and 1999-2000 are based on GDP values of 1993-94 prices and with the 1993-94 work force estimates by Sectors revised as per NIC 1998 and comparable to the personal set of estimates.

Sources:

- 1 Estimates of Number of Workers computed by the author, separately by gender and rural-urban location for each broad industry-group combining level estimate of total workforce (Table 4) and industry-group shares in Table 7.
- 2 Estimates of Gross Domestic Product as 1999-2000 prices from CSO, National Accounts Statistics 2006, July 2006.

Table 11: Rate of Growth of Real Wages of Adult (15.59) Casual Labourers: All India 1983-2004-05

Segment/ Period	Rate of Growth (Percent Per annum)		
	1983-1993-94	1993-94-1999-2000	1999-2000-2004-05
Rural Males			
Agriculture	2.75	2.78	1.43
Non-Agriculture	2.39	3.70	0.73
All Activities	2.51	3.59	1.80
Rural Females			
Agriculture	3.09	2.94	1.10
Non-Agriculture	4.08	4.07	1.57
All Activities	4.10	5.04	1.44
Urban Males			
Agriculture	1.97	2.73	(-) 1.22
Non-Agriculture	1.45	2.93	(-) 0.51
All Activities	1.50	3.09	(-) 0.39
Urban Females			
Agriculture	4.21	2.96	(-) 2.35
Non-Agriculture	2.97	4.18	(-) 0.74
All Activities	2.91	3.91	(-) 1.05

Source: For rural areas, estimates for the periods 1983-1993-94 and 1993-2000 are drawn from Sundaram (2001).

For urban areas, estimates for the periods 1983-1993-94 and 1993-94-1999-2000 are drawn from Sundaram and Tendulkar (2006).

For the period 1999-2000-2004-05, growth rates of real wages (at 1999-2000 prices) in both rural and urban areas have been computed from published reports (Nos: 458 and 515) of NSS Employment-Unemployment Surveys for 1999-2000 and 2004-05.

**Table 12: Estimate of Head Ratios of Households and Persons with Planning Commission
and Alternative Poverty Lines: All-India : 1993-94 - 2004-05**

Panel A: With Planning Commission Poverty Lines

Head Count Ratios (per cent)

	Households			Person		
	1993-94	1999-2000	2004-05	1993-94	1999-2000	2004-05
Rural	28.0	23.3	18.8	31.8	27.0	22.7
Urban	22.7	18.1	16.6	28.1	23.4	21.9

P. C. Poverty Lines: 1993-94 : Rural : 205.84 Urban : 281.33
1999-00 : Rural : 327.56 Urban : 454.11
2004-05 : Rural : 356.30 Urban : 538.60

Panel B: With Alternative Poverty Lines

Head Count Ratios (per cent)

	Households			Persons		
	1993-94	1999-2000	2004-05	1993-94	1999-2000	2004-05
Rural	30.3	25.1	21.7	34.2	28.9	25.5
Urban	21.3	17.8	17.4	26.4	23.1	22.8

Alternative Poverty Lines: 1993-94: Rural: 211.30, Urban: 274.88
 1999-00: Rural: 335.46, Urban: 451.19
 2004-05: Rural: 371.29, Urban: 546.20

Note:

1. Alternative Poverty Lines have been updated by reference to CPIAL for rural India and CPIIW for urban India.
2. All estimates for 1993-94 are on mixed reference period and estimated from Unit Record Data. See Sundaram and Tendulkar (2005)

Table 13: The Working Poor in India by Gender, Activity-status and Rural-Urban Location: All-India, 1999-2000 - 2004-05

Number of UPSS Workers in BPC Households
(in thousands)

Population Segment	1999-2000				2004-05			
	SE	RWS	CL	Total	SE	RWS	CL	Total
Rural (Males + Females)	35,151 (20.8)	2,615 (12.4)	44,528 (38.7)	82,294 (26.9)	38,281 (18.6)	2,611 (10.8)	38,590 (34.3)	79,482 (23.2)
Urban (Males + Females)	9,243 (23.0)	4,103 (10.8)	7,522 (43.6)	20,868 (21.9)	12,271 (23.5)	4,740 (10.4)	7,994 (46.2)	25,005 (21.7)
Males (Rural + Urban)	28,449 (20.1)	5,432 (11.0)	32,560 (37.7)	66,441 (24.0)	31,402 (18.7)	5,451 (9.7)	30,090 (35.3)	66,943 (21.6)
Females (Rural + Urban)	15,945 (23.5)	1,286 (13.6)	19,490 (42.2)	36,721 (29.7)	19,150 (21.1)	1,900 (14.2)	16,494 (37.0)	37,544 (25.3)
Person (Rural + Urban)	44,394 (21.2)	6,718 (11.4)	52,050 (39.3)	103,162 (25.7)	50,552 (19.6)	7,351 (10.5)	46,584 (35.9)	104,487 (22.8)

Notes: Figures within brackets refers the proportion of workers in that population segment and activity-status, who are located in 'below poverty line' (BPL) Households. HCRs are based on the alternative poverty line indicated in Table 11.

**Table 14: Average Annual Increments to workers in APL-Households by Activity-status and Rural-Urban Location:
All-India, 1983 – 2005**

Average Annual Increments to workers in All-Households
(in thousands)

	Rural			Urban			All Areas		
	1983-94	1994-2000	2000-05	1983-94	1994-2000	2000-05	1983-1994	1994-2000	2000-05
S. E	2697	1149	6772	572	923	1822	3269	2072	8594
RWS	283	435	651	629	1038	1363	912	1473	2014
CL	1910	2613	629	112	385	(-) 80	2022	2998	543
All	4890	4496	8052	1313	2346	3105	6203	6842	11,152